

December 2017

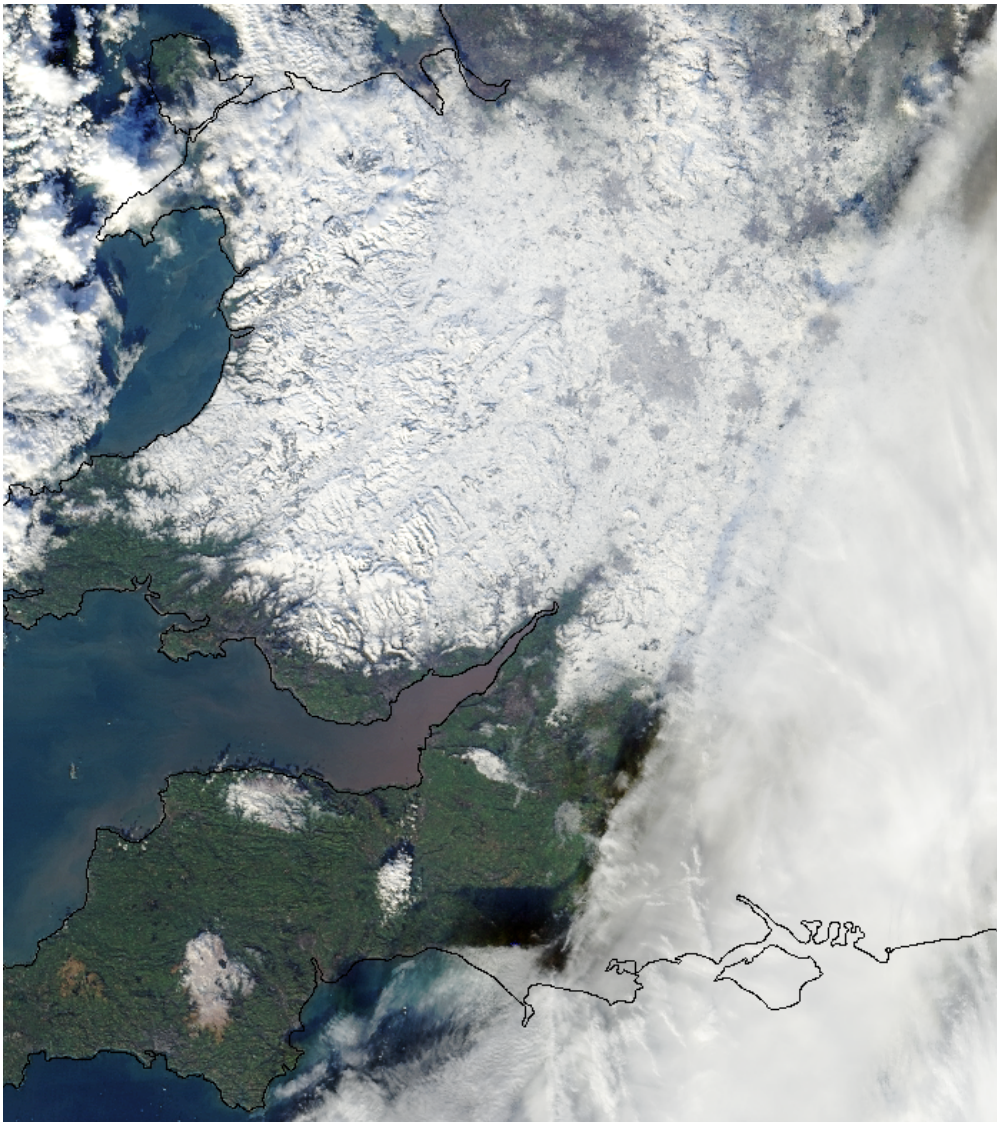
The averaging period used for the following assessment was 1981-2010.

December began cold and frosty in a northerly outbreak, but the rest of the first week was mostly mild and cloudy. There were strong winds associated with Storm Caroline on the 7th, and this was followed by a cold wintry spell from the 8th to 16th, which brought widespread frosts, and snow for some, especially the Midlands. It was generally mild from the 17th to 25th, but after Christmas there was further snow for some, this mainly affecting the north. The last third of the month was increasingly unsettled and Storm Dylan brought further strong winds on the 30th/31st.

The UK mean temperature was 4.1 °C, which is 0.2 °C above the 1981-2010 long-term average. Both maximum and minimum temperatures were between 0 and 0.5 °C above average over most of the country, but mostly near 0.5 °C above in the south-west. Rainfall was 101% of average, and it was a drier than average month for much of eastern Scotland and north-east England, but it was wetter than average in East Anglia and the south-east. Sunshine was 111% of average, and it was a very sunny December in north-east England and in southern and central Scotland, but much duller than average in north-west Scotland and north-west Wales.

The UK monthly extremes were as follows: A maximum temperature of 15.2 °C was recorded at Cassley (Sutherland) on the 18th. A minimum temperature of -13.0 °C was recorded at Dalwhinnie (Highland) on the 11th and at Shawbury (Shropshire) on the 12th. In the 24 hours ending at 0900 GMT on the 25th, 212.6 mm of rain fell at Ennerdale, Black Sail (Cumbria). A wind gust of 81 knots (93 mph) was recorded at Fair Isle (Shetland) on the 7th. A snow depth of 40 cm was recorded at Llanarmon Dyffryn Ceiriog (Wrexham) on the 11th.

The satellite image below shows lying snow across Wales, the Cotswolds, Mendips, Blackdown Hills, Dartmoor and Exmoor on 11 December 2017 following widespread snowfall the previous day. The greatest depths were across Wales and the West Midlands with 28cm at Sennybridge (Powys), 23cm at Underton (Shropshire) and 16cm at Velindre (Powys). Birmingham and surrounding urban areas can clearly be seen. Image copyright Met Office / NASA / NOAA



Weather impacts

On the 7th, Storm Caroline caused disruption to travel, and power cuts with approximately 49,000 customers affected in Scotland. North Sea helicopter flights were disrupted, and train services across northern Scotland were pre-emptively withdrawn. Schools across Lewis, Harris and Uist were closed, no buses were running on the islands, and restrictions were put in places across the main bridges in Scotland. In Northern Ireland, there were delays to rail services on the Belfast-Londonderry line, and all ferry sailings to Rathlin Island were cancelled. Surface water in Wales resulted in some traffic accidents and delays.

On the 10th, there was widespread disruption due to snow. Schools were closed in many areas; roads were closed due to hazardous conditions, with severe disruption also to rail and air travel. Power outages occurred due to damaged lines in the West Midlands and parts of Wales. Significant disruption was experienced on the M11 and M25, and strong winds brought a few trees down in the south-west. Between the 11th and 18th there was travel disruption due to further snowfall and ice across Scotland, parts of Wales and central England. In North Wales, some flooding occurred on roads and rail lines due to heavy showers. Throughout this period,

impacts from snow and ice continued to cause problems with accidents, severe disruption and some road closures on high routes. In Cornwall, intense hail showers caused several accidents on the A30.

Between the 25th and 27th a mix of rain, sleet and snow caused disruption. Throughout this period, roads were closed and there was further disruption to rail and air travel. Flights at Luton and Stansted were cancelled with Stansted airport closing for a time due to snow. The Welsh Grand National was postponed due to the weather. On the 28th and 29th, snow and strong winds caused travel disruption with some roads closed due to snow and ice. Across the south-west of England fallen trees caused travel disruption. On the 30th and 31st snow and ice caused further travel disruption across the country, particularly over the Pennines. There were some road traffic accidents in Scotland. Storm Dylan brought strong winds, and trees down in the South West also caused travel disruption. There were fallen trees also across Northern Ireland, with the Foyle Bridge closed for a time.

England diary of highlights

December was a mostly unsettled month, but with some brief anticyclonic spells, and had alternating mild and cold periods. The first week was mostly mild, but between the 8th and 16th it was often cold and frosty, and there was snow for some, especially in the Midlands. It was mild with westerly or south-westerly winds for most of the second half of the month, but there were further snowfalls after Christmas in some areas.

The mean temperature for December was 0.3 °C above the 1981-2010 long-term average. Rainfall was 113% of average, and it was a wet month in East Anglia and the south-east but drier than average in the north-east. Sunshine was mostly near or above average, with 118% of average overall, and it was a notably sunny December in the north-east.

1st to 6th

Some rural areas started frosty on the 1st, followed by a mostly sunny day, with scattered sleet showers in the east. The 2nd was mostly dull, with rain at first in the south, otherwise patchy rain and drizzle, though it was brighter and mainly dry in the east. It was mainly cloudy and dry on the 3rd, though with very isolated rain and drizzle, and some sunny spells in the north-east. The 4th was sunny in the east, cloudy in the west, with isolated showers in the north-west and patchy rain and drizzle in the south-west. Mainly cloudy and dry on the 5th, patchy rain and drizzle in the north-west and south-west. Cloudy on the 6th with bands of rain moving from west to east and Shap (Cumbria) recording 53.4 mm, and it was windy over Cumbria and Cornwall; it was mild with Westonzoyland (Somerset) recording 13.9 °C.

7th to 16th

A cloudy and wet start on the 7th with rain moving south-east across all regions, followed by heavy and increasingly wintry showers in western areas. The 8th was cold, dry and sunny in the north and east, but heavy snow showers affected Cheshire, Shropshire and the west Midlands, and showers in the south-west were wintry on high ground. The 9th turned mild in the south-west, where it became wet in the afternoon, while there were wintry showers over the north-west, but it was cold, dry and sunny elsewhere. Mild and breezy across the south on the 10th where Needles (Isle of Wight) recorded a gust of 82 mph, cold and clear further north but with isolated snow showers in the east; very wet elsewhere with significant snowfall through the Midlands. Cold, bright and dry in the north on the 11th, milder and wet in the south, the rain moving east and dying out, but isolated wintry showers affected the east later. It was sunny and dry for most on the 12th after a frosty start, but milder and cloudier in the south-west with rain spreading in later, preceded by sleet/snow on higher ground. Cloudy on the 13th after a very cold start when the temperature at Shawbury (Shropshire) fell to -13.0 °C; rain affected some areas, heavy at times, moving south-east during the day, then isolated showers followed behind and became wintry in the north. The 14th had sunshine and scattered showers in the south-west, and showers in the north merged into longer periods of rain, with sleet and snow on higher ground. Mostly sunny on the 15th in central and southern areas, showery in the south-west with hail locally, and in the

east where the showers fell as snow on higher ground. Generally dry, bright and cold on the 16th, but some showers through the Midlands and south-west.

17th to 25th

Wet in the north-west on the 17th, with freezing rain in places and snow on higher ground, clearing south-eastwards by evening, and turning milder. Fog in central and southern parts on the 18th cleared to leave a generally mild, sunny day. Fog in some places on the 19th, clearing except in parts of the north, and it became mostly fine and mild. Further fog on the 20th, with freezing fog especially in central and eastern parts, proved slow to clear, with patchy rain in the north dying out by mid-afternoon. Cloudy on the 21st, with isolated fog patches, light rain in the far east at first, and rain and drizzle in the north-west. Mainly dull on the 22nd with isolated fog patches especially in the north, brighter spells in some central counties, while patchy drizzle mainly affected the west and south-east. Mainly cloudy and mild on the 23rd with patchy drizzle, more persistent in the west, though dry with some sunshine in eastern and central regions. Continuing mainly cloudy and mild on the 24th, with patchy drizzle, most persistent in the north and south, and rain moving into the north-west in the afternoon. Christmas Day generally mild and windy, with rain over the north and west.

26th to 31st

Showers affected the north on the 26th; the south became wet by midday, with snow on higher ground. Rain, sleet and snow over the east slowly cleared on the 27th, and it was windy with a gust of 82 mph at Needles (Isle of Wight); cold with wintry showers in western areas. The 28th saw widespread early frost, then was generally sunny with wintry showers through the Cheshire Gap and over the far south-west. On the 29th a band of sleet/snow in the north and rain in the south spread eastwards in the morning and lingered in the north-west; turning brighter in the south with squally, thundery showers, dying out later. Mainly cloudy on the 30th; some wintry showers in the north, milder in the south with isolated showers, before heavy rain reached the south-west later. Storm Dylan meant a windy start on the 31st, with rain clearing from the south-east but widespread heavy showers during the afternoon, though some central and eastern areas remained dry and bright.

Wales diary of highlights

December was a generally unsettled month but with short-lived anticyclonic spells, and there were alternating mild and cold spells. Frost occurred frequently between the 7th and 16th, when there was also widespread snow at times, and to a lesser extent after Christmas, but it was milder in the first week and between the 20th and 25th.

The mean temperature for the month was 0.5 °C above the long-term average. Rainfall was generally close to average, with 103% of average overall. Sunshine was 95% of average, but with a contrast between above-normal amounts in the east and below-normal in the west.

1st to 6th

After a frosty start on the 1st in some rural areas, and, with isolated showers in the far west at first, it became a sunny day. The 2nd was duller with patchy rain and drizzle, then the 3rd was mostly cloudy and dry but with further patchy rain and drizzle in the south and west. It was cloudy on the 4th, with isolated showers in the far north, and some rain and drizzle in the south. Mainly cloudy and dry on the 5th, with patchy rain and drizzle over the west and south-west. The 6th was cloudy also with bands of rain, heavy in places, moving from west to east, Capel Curig (Gwynedd) recording 61 mm of rainfall, and it was windy over western areas

7th to 16th

Rain moved south-eastwards on the 7th, so after a cloudy and wet start in the south and east, heavy and increasingly wintry showers followed into the north-west and later across all areas. The 8th was a cold day,

with scattered heavy sleet and snow showers in most areas. A widespread frost on the 9th was followed by a cloudy day, with wintry showers in the north and west. Everywhere was wet on the 10th, with significant snowfall especially across southern parts, and it was also windy near exposed coasts with Mumbles (West Glamorgan) recording a gust of 73 mph. The 11th started frosty and was then sunny for most, away from the north, with scattered wintry showers in the far west and over high ground in the north; Sennybridge (Powys) recorded 31 cm of lying snow. The 12th started fine and frosty with a minimum temperature of -11.0 °C at Bala (Gwynedd), followed by a cloudy day with afternoon rain moving across from the west, preceded by sleet/snow on higher ground. It was mainly cloudy on the 13th, with heavy rain at first which turned showery during the afternoon; more rain spread from the west later, wintry over high ground. The 14th was mostly cloudy, with showers which became more widespread later, heaviest over the north and wintry over higher ground. The 15th started mostly bright/sunny; scattered showers in the north and west died out during the afternoon, but cloud increased later. There were sunny intervals on the 16th with frequent wintry showers.

17th to 25th

On the 17th, rain, freezing in places especially in the east, turned showery in the afternoon as milder air spread in. There was a widespread frost early on the 18th with some patchy fog, but this cleared leaving a sunny, mild day. Fog persisted around the coasts on the 19th, otherwise dry and mild although quite cloudy. Foggy around coasts again on the 20th with patchy rain moving south during the day, but mild with a maximum of 14.5 °C at Usk (Monmouthshire). The 21st was dull after early morning coastal fog, with patchy rain or drizzle, especially in the south. Mainly cloudy with occasional fog patches on the 22nd, and patchy drizzle, mostly in the west. Mild on the 23rd; mostly cloudy with patchy drizzle in the west, but mainly dry with some sun in eastern and central areas. Cloudy and mild on the 24th, patchy rain mostly affecting western parts. After a dry start on the 25th, it turned wet and windy from the north during the afternoon.

26th to 31st

Sunshine and showers initially on the 26th, turning very wet from the south-west during the afternoon. Generally cloudy with wintry showers merging into longer spells of rain, sleet and snow on the 27th. After a widespread frost into the 28th, it was bright or sunny with just a few isolated wintry showers. The 29th started cloudy, with rain in the north-east, and sleet or snow on higher ground, then sunshine and scattered showers followed from the west, the showers wintry over high ground but dying out later. Mainly cloudy on the 30th, and milder than of late; scattered showers developed in the morning, becoming more isolated during the afternoon. The 31st started windy in association with Storm Dylan overnight, and was mainly cloudy with showers, these becoming more widespread and intense during the afternoon.

Scotland diary of highlights

December was a mixed month with alternating mild and cold spells. The month began mild, and after a cold spell from the 7th to 16th with widespread frosts and also frequent snow in the north, it was mostly mild and increasingly wet from the 17th to 25th, but there was further cold wintry weather after Christmas.

The mean temperature for December was 0.1 °C above the long-term average. Rainfall was 90% of average, and it was generally drier than average in central and eastern counties but with near average rainfall in the west. Sunshine was 103% of average, and it was a very sunny December in the south, but a very dull one in the north-west.

1st to 6th

After a frosty start on the 1st in some areas, it was mostly dry but with isolated showers; mainly cloudy in the north, some sunshine in the south. Mostly cloudy on the 2nd, with some rain in the north-west, and rain moved southwards during the afternoon, mostly affecting the east. Cloudy in the north on the 3rd, brighter in the south, and mainly dry. It was cloudy in the north and west on the 4th, with occasional light rain in the west, and sunnier further south and east. Mainly cloudy and dry on the 5th, rain across the north-west becoming heavy,

windy too across the north-west Highlands and Northern Isles. Cloudy on the 6th with bands of rain moving from west to east, heaviest across the west where Achnagart (Ross and Cromart) recorded 71mm of rainfall; windy but drier over Shetland.

7th to 16th

A day of sunshine and blustery showers for most areas on the 7th, the showers heavy in places and turning wintry; drier and brighter in the south-east corner, but stormy in the Northern Isles where a gust of 93 mph was recorded at Fair Isle (Shetland). A cold day with scattered, heavy and blustery snow showers across northern and western areas on the 8th, dry and sunny for most central and southern areas. Widespread frost on the 9th with frequent, blustery, wintry showers in most places, but drier and brighter in the south. Generally sunny but bitterly cold on the 10th with frequent wintry showers across the north, and Achfary (Sutherland) having 17 cm of lying snow. Very cold, frosty start to the 11th when the temperature fell to -13.0 °C at Dalwhinnie (Inverness-shire); mainly cloudy in the north with scattered wintry showers, dry and bright further south. The 12th started frosty and became mostly cloudy, with rain moving in from the west during the afternoon, preceded by sleet/snow or freezing rain. Mainly cloudy on the 13th, rain at first, turning showery, these showers mainly in the west and turning increasing wintry. The 14th was cold, mainly cloudy away from the north-east; frequent wintry showers over the north-west and south, with snow over higher ground. It was mostly sunny and mainly dry in the south on the 15th, but cloudier in the north with scattered wintry showers. Cold but sunny on the 16th with wintry showers confined to northern and eastern coasts.

17th to 25th

Rain, falling as snow on higher ground and freezing in places especially in the south, quickly cleared eastwards on the 17th, replaced with showers, and it turned milder. Fog persisted in the south on the 18th but it was otherwise a generally cloudy and mild day, Cassley (Sutherland) recording 15.2 °C, with scattered outbreaks of light rain over the north and west. Generally mild on the 19th, cooler and foggy in the south, bright in the east and wet further north and west. It was cool, foggy and drizzly in the south on the 20th, drier, brighter and mild towards the north-east. Mainly cloudy on the 21st, with some fog patches in the south; some sunshine in the east and north, but patchy rain later in the north. Mostly dull on the 22nd with patchy rain and drizzle and isolated fog patches, but dry and sunny in the north-east. Very mild and mainly cloudy on the 23rd, some brightness in the far east, drizzly with fog patches in the south, and rain spreading southwards by midday, mostly affecting the north and west. Cloudy on the 24th with rain, occasionally heavy, moving down from the north-west and clearing early afternoon, leaving patchy rain or drizzle. Wet across the south and east on the 25th, but just a few showers across the north and west.

26th to 31st

Much colder on the 26th with frequent and prolonged wintry showers over the far north. There were further frequent wintry showers on the 27th but the south was mainly dry and sunny. The 28th dawned with a widespread frost, then the south was sunny, while further north it was cloudier with wintry showers. After a frosty start on the 29th, sleet and snow moved across from the west with some significant snow accumulations, dying out and turning to rain during the afternoon, followed by scattered showers. It was mainly cloudy on the 30th, with scattered showers in the far north; rain with sleet/snow on higher ground in the south-west moved north-east during the afternoon. The 31st started windy due to Storm Dylan, and early rain cleared north-east during the day, but continued in the north and west, while central areas saw sunshine and showers.

Northern Ireland diary of highlights

December was a predominantly unsettled month with a mix of mild and cold spells but also brief anticyclonic interludes. The coldest spell occurred between the 7th and 16th when there was widespread snow and frost.

From the 17th onwards it was generally somewhat milder with mainly westerly and south-westerly winds, but it turned colder after Christmas with some snow mainly on high ground.

The mean temperature for December was 0.2 °C above the 1981-2010 average. Rainfall was 101% of average and sunshine was 90% of average, but it was mostly sunnier than average in the east and cloudy in the west.

1st to 6th

The 1st started frosty in some rural areas, and was a mainly cloudy day with just isolated showers. It was mostly dull on the 2nd, with patchy rain and drizzle. Cloudy on the 3rd, mainly dry, but patchy rain and drizzle in the west spread eastwards in the afternoon. It was dull on the 4th, with occasional rain and/or drizzle, especially in the north and west. Mainly cloudy and dry on the 5th, with patchy light rain and drizzle in places. Cloudy on the 6th with bands of rain, heavy in places, moving from west to east; breezy too, especially towards the north coast, but very mild with Killowen (County Down) recording 14.6 °C.

7th to 16th

The 7th was a day of sunshine and blustery showers, the showers heavy in places and turning wintry. A cold day followed on the 8th with scattered heavy snow showers in most areas. Cold and cloudy with isolated wintry showers on the 9th, with 11 cm of lying snow recorded at Lough Fea (County Londonderry). The 10th was mainly dry and sunny after a frosty start. The 11th started frosty too, with a minimum of -9.6 °C at Katesbridge (County Down), and isolated fog patches, then it was mainly cloudy, with some wintry showers, especially in the west. It was cloudy on the 12th, and rain moved across from the west during the morning, with sleet and snow over higher ground, becoming showery later. Cold and mainly cloudy on the 13th, with scattered showers, which turned increasingly wintry. The 14th also started cold and cloudy, with scattered wintry showers, but brighter spells developed. Mainly sunny on the 15th, with isolated showers, the showers wintry over high ground, and breezy with a gust of 66 mph at Orlock Head (County Down). The 16th was a bright day with isolated wintry showers.

17th to 25th

On the 17th rain spread eastwards during the morning, and the afternoon was drier and brighter. Cold with patchy fog to start the 18th, followed by a cloudy mild day, and the 19th was also cloudy and mild. Again cloudy and mild on the 20th, with rain reaching western parts by evening. Dull after early morning fog on the 21st, with patchy rain and drizzle. Continuing dull on the 22nd, with isolated fog patches and patchy drizzle. Mostly cloudy on the 23rd, mainly dry and mild. The 24th was another cloudy mild day, and patchy rain or drizzle spread from the west. Mild and wet on the 25th, though a little drier in the afternoon.

26th to 31st

The 26th was colder with sunshine and showers. The 27th saw further sunshine and showers, some of the showers wintry. Widespread frost early on the 28th, then sunshine and a few wintry showers. The 29th was mainly cloudy, rain spreading from the west during the morning preceded by sleet or snow, especially on higher ground, and scattered showers followed during the afternoon. Starting mostly cloudy on the 30th with scattered showers, these tending to die out during the afternoon to allow some brighter spells. Overnight Storm Dylan caused a breezy start on the 31st, then it was bright, with showers mainly in the north and west.

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